

Appl. No.: 10/647,550

Response to Office communication dated: 06/08/2006

Attorney Docket: UCONEN/206/US

## REMARKS

No claims are being added. Claims 2 and 12 were previously cancelled. Claims 1, 11, 14, 16, 18, 20 and 22 are being amended to change the transitional term "comprising". The amendment is supported by the specification and adds no new matter. Upon entry of this amendment claims 1, 3-11 and 13-23 will be pending in the application.

## RESTRICTION/ELECTION

The Office Communication dated 6/8/06 for the above application imposed a 3 way restriction requirement between the asserted inventions of Groups I - III with a further requirement to elect a single disclosed species within the chosen Group.

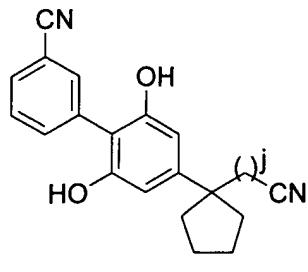
There has been no assertion that any of Applicant's pending claims lack unity of invention which is required for restriction between members of a Markush group under 35 U.S.C. §121. For this reason Applicant respectfully traverses the pending restriction.

- **The elected group**

In order to strictly comply with the restriction requirement, and without agreeing to the propriety of the restriction requirement, Applicant elects, with traverse, the invention of Group I, including claims 1, 3 - 11 and 13 drawn to compounds and their compositions.

- **The elected species**

Applicant selects the following single species within elected Group I.



j = 1-7

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The selected species is supported by the specification at least as follows:

Compound formula I wherein the "A" ring atoms are carbon;

Ar is an aromatic ring (phenyl) with one substituent group (CN);

R is OH;

R' is OH;

R''' is H;

R'''' is H; and

R'' is Y-D<sub>1</sub>-D<sub>2</sub>-T<sub>2</sub>;

Y is a carbocyclic ring having 5 ring members;

D<sub>1</sub> is not present;

D<sub>2</sub> is alkyl;

T<sub>2</sub> is a CN substituent group; or

Y is not present;

D<sub>1</sub> is not present;

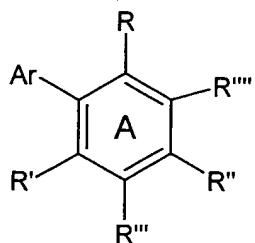
D<sub>2</sub> is a carbocyclic ring having 5 ring members;

T<sub>2</sub> is a CN substituent group.

- **The family proposed for examination in this application**

Applicant proposes the following family within the elected group for examination.

The structure of compound formula I:



wherein:

the "A" ring atoms are carbon;

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Ar is a phenyl ring substituted with a single Y moiety,

Y is selected from CN, OX<sub>3</sub>, O-acyl, COOX<sub>3</sub>, CONX<sub>1</sub>X<sub>2</sub>, alkyl, alkyl-CN, alkyl-COOalkyl or alcohol, wherein X<sub>1</sub> and X<sub>2</sub> are each independently selected from H or alkyl and X<sub>3</sub> is selected from H or alkyl;

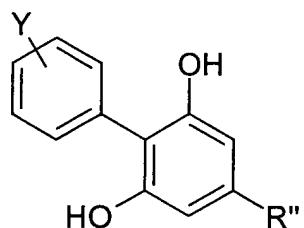
R is OH;

R' is OH;

R'' is H; and

R''' is H.

Thus, each of the elected compounds will share the following common structure:



Applicant's elected compounds will also limit the R'' possibilities from all of the possible disclosed variations to:

R'' is Y-D<sub>1</sub>-D<sub>2</sub>-T<sub>2</sub>,

Y is optionally present and if present is selected from C=CH, C≡C, CH<sub>2</sub>, CH(CH<sub>3</sub>), C(CH<sub>3</sub>)<sub>2</sub>, a carbocyclic ring having 4 to 6 ring members or a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D<sub>1</sub> is optionally present and if present is alkyl,

D<sub>2</sub> is selected from H, alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a tricyclic ring, an aromatic ring or a heteroaromatic ring,

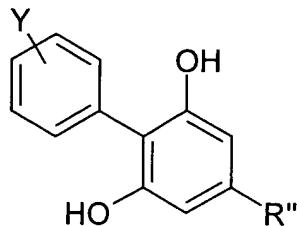
T<sub>2</sub> is optionally present and if present is selected from an aromatic ring, a substituted aromatic ring, a heteroaromatic ring, a substituted heteroaromatic ring, a heterocyclic ring, a substituted heterocyclic ring or a substituent group.

Thus, the proposed family would be limited to compounds having the following structure:

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wherein;

Y is selected from CN, OX<sub>3</sub>, O-acyl, COOX<sub>3</sub>, CONX<sub>1</sub>X<sub>2</sub>, alkyl, alkyl-CN, alkyl-COOalkyl or alcohol, wherein X<sub>1</sub> and X<sub>2</sub> are each independently selected from H or alkyl and X<sub>3</sub> is selected from H or alkyl; and

R'' is Y-D<sub>1</sub>-D<sub>2</sub>-T<sub>2</sub>,

Y is optionally present and if present is selected from C=CH, C≡C, CH<sub>2</sub>, CH(CH<sub>3</sub>), C(CH<sub>3</sub>)<sub>2</sub>, a carbocyclic ring having 4 to 6 ring members or a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D<sub>1</sub> is optionally present and if present is alkyl,

D<sub>2</sub> is selected from H, alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a tricyclic ring, an aromatic ring or a heteroaromatic ring,

T<sub>2</sub> is optionally present and if present is selected from an aromatic ring, a substituted aromatic ring, a heteroaromatic ring, a substituted heteroaromatic ring, a heterocyclic ring, a substituted heterocyclic ring or a substituent group.

The Court of Appeals for the Federal Circuit, in the case of In re Watkinson, 14 USPQ2d 1407, 1409 (Fed. Cir. 1990), stated, with emphasis in original:

Under In re Weber, 580 F.2d 455, 458, 198 USPQ 328, 332 (CCPA 1978)

and In re Haas, 580 F.2d 461, 464, 198 USPQ 334, 336 (CCPA 1978), it is never proper for an Examiner to reject a Markush claim under 35 U.S.C. §121. Section 121 simply does not authorize such a rejection.

The MPEP in section 803.02, acknowledging the Court decisions of In re Weber,

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and In re Haas states: "it is improper for the Office to refuse to examine that which Applicants regard as their invention, unless the subject matter in a claim lacks unity of invention." That section of the MPEP goes on to illustrate the examination of an elected species of a Markush claim followed by, in the proper circumstances, examination of the *non-elected species*.

Under the Court precedent of *In re Hamish* and *Ex parte Hozumi* cited by MPEP section 803.02, with bracketed text added, "unity of invention exists where compounds included within a Markush group (1) share a common utility and (2) share a substantial structural feature disclosed as being essential to that utility.

The compounds within the Markush group of Applicant's proposed family (1) share a common utility [the compounds are believed to have binding affinity for one or both cannabinoid receptors] and (2) share a substantial structural feature disclosed as being essential to that utility [the compounds share a bicyclic structure with limited substituent moieties at limited positions]. Thus, Applicant's proposed family has unity of invention and is a proper subject for examination in this application.

Further, Applicant's proposed family provides a rational, clear and concise basis from which to file subsequent divisional applications.

Applicant will amend the compound and method claims to reflect the examined family once that family has been established on the record.

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The Examiner is invited to telephone Applicant's attorney if it is deemed that a telephone conversation will hasten prosecution of this application.

Respectfully submitted,

Alexandros Makriyannis et al

Date: 1-3-2007  
750 Main Street- Suite 1400  
Hartford, CT 06103-2721  
(860) 527-9211

By:

  
James E. Piotrowski  
Registration No. 43,860  
Alix, Yale & Ristas, LLP  
Attorney for Applicants

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